Wyoming Mathematics

Grade 1

Adopted 2021

Standards for Mathematical Practice

1. **Make sense of problems and persevere in solving them.** MP.1
2. **Reason abstractly and quantitatively.** MP.2
3. **Construct viable arguments and critique the reasoning of others.** MP.3
4. **Model with mathematics.** MP.4
5. **Use appropriate tools strategically.** MP.5
6. **Attend to precision.** MP.6
7. **Look for and make use of structure.** MP.7
8. **Look for and express regularity in repeated reasoning.** MP.8

Operations And Algebraic Thinking

A. Represent and solve problems involving addition and subtraction. 1.OA.A

1. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, by using objects, drawings, or equations with a symbol for the unknown number to represent the problem. 1.OA.A.1

Ad. Create and solve an addition or subtraction word problem within 20. 1.OA.A.1.AD

P. Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, by using objects, drawings, or equations with a symbol for the unknown number to represent the problem. 1.OA.A.1.P

Ba. Use addition and subtraction within 10 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, by using objects, drawings, or equations with a symbol for the unknown number to represent the problem. 1.OA.A.1.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.A.1.BEB

2. Solve word problems that call for the addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings, or equations. 1.OA.A.2

Ad. Solve a missing addend word problem that calls for the addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings, or equations. 1.OA.A.2.AD

P. Solve word problems that call for the addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings, or equations. 1.OA.A.2.P

Ba. Add three whole numbers whose sum is less than or equal to 20, by using objects, drawings, or equations. 1.OA.A.2.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.A.2.BEB

B. Understand and apply properties of operations and the relationship between addition and subtraction. 1.OA.B

3. Apply Commutative and Associative Properties of addition as strategies to add and subtract. 1.OA.B.3

Ad. Describe the relationships when applying the properties of addition. 1.OA.B.3.AD

P. Apply Commutative and Associative properties of addition as strategies to add and subtract. 1.OA.B.3.P

Ba. Apply Commutative Property of addition. 1.OA.B.3.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.B.3.BEB

4. Understand subtraction as an unknown-addend problem. 1.OA.B.4

Ad. Write all equivalent addition or subtraction equations relating three whole numbers within 20. 1.OA.B.4.AD

P. Understand subtraction as an unknown-addend problem. 1.OA.B.4.P

Ba. Understand subtraction as an unknown-addend problem within 10. 1.OA.B.4.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.B.4.BEB

C. Add and subtract within 20. 1.OA.C

5. Relate counting to addition and subtraction using strategies, such as, by counting on and back. 1.OA.C.5

Ad. Given a counting on or counting back situation, write related addition or subtraction equations (e.g., 42,41,40,39. 42−3=39, or 42−39=3). 1.OA.C.5.AD

P. Relate counting to addition and subtraction using strategies, such as, by counting on and back. 1.OA.C.5.P

Ba. Relate counting to addition by counting on. 1.OA.C.5.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.C.5.BEB

6. Add and subtract within 20, demonstrating fluency in addition and subtraction within 10. Use strategies such as counting on; making ten using the relationship between addition and subtraction. 1.OA.C.6

Ad. Add and subtract within 20, demonstrating fluency in addition and subtraction within 10 by utilizing multiple strategies, such as: counting on; making ten using the relationship between addition and subtraction. 1.OA.C.6.AD

P. Add and subtract within 20, demonstrating fluency in addition and subtraction within 10. Use strategies such as counting on; making ten using the relationship between addition and subtraction. 1.OA.C.6.P

Ba. Add and subtract within 10 using strategies such as counting on; making ten using the relationship between addition and subtraction. 1.OA.C.6.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.C.6.BEB

D. Work with addition and subtraction equations. 1.OA.D

7. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. 1.OA.D.7

Ad. Determine if equations involving addition and subtraction are true or false and rewrite false equations to make them true. 1.OA.D.7.AD

P. Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. 1.OA.D.7.P

Ba. Use the equal sign to make a true addition or subtraction equation given a visual representation of a situation. 1.OA.D.7.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.A.7.BEB

8. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. 1.OA.D.8

Ad. Describe multiple strategies for determining the unknown whole number in an addition or subtraction equation relating three whole numbers. 1.OA.D.8.AD

P. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. 1.OA.D.8.P

Ba. Determine the unknown whole number in an addition or subtraction equation relating three whole numbers less than 10. 1.OA.D.8.BA

BeB. The Below Basic student does not meet the Basic performance level. 1.OA.D.8.BEB

Number And Operations In Base Ten

E. Extend the counting sequence. 1.NBT.E

1. Extend the number sequences to 120. In this range: 1.NBT.E.1

   A. Count forward and backward, starting at any number less than 120. 1.NBT.E.1.A

   B. Read numerals. 1.NBT.E.1.B

   C. Write numerals. 1.NBT.E.1.C

   D. Represent a number of objects with a written numeral. 1.NBT.E.1.D

Ad. The advanced student is able to:
Count forward and backward by 10, starting at any number less than 120, OR
Count forward and backward by 2, starting at any even number less than 120. OR
Count forward and backward by 5, starting at any multiple of 5 less than 120. 1.NBT.E.1.AD

P. Extend the number sequences to 120. 1.NBT.E.1.P

   A. Count forward and backward, starting at any number less than 120. 1.NBT.E.1.P.A

   B. Read numerals. 1.NBT.E.1.P.B

   C. Write numerals. 1.NBT.E.1.P.C

   D. Represent a number of objects with a written numeral. 1.NBT.E.1.P.D

Ba. Extend the number sequences to 120 with guidance. 1.NBT.E.1.BA

   A. Count forward starting at any number less than 120. 1.NBT.E.1.BA.A

   B. Read numerals. 1.NBT.E.1.BA.B

   C. Write numerals. 1.NBT.E.1.BA.C

   D. Represent a number of objects with a written numeral. 1.NBT.E.1.BA.D

F. Understand place value. 1.NBT.F

2. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 1.NBT.F.2

   A. 10 can be thought of as a bundle of ten ones — called a "ten." 1.NBT.F.2.A

   B. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. 1.NBT.F.2.B

   C. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). 1.NBT.F.2.C

Ad. Represent any two digit number in multiple ways using tens and ones (e.g., 67 is 6 tens and 7 ones, or 4 tens and 27 ones, etc.). 1.NBT.F.2.AD

P. Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: 1.NBT.F.2.P

   A. 10 can be thought of as a bundle of ten ones -- called a "ten." 1.NBT.F.2.P.A

   B. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. 1.NBT.F.2.P.B

   C. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). 1.NBT.F.2.P.C

Ba. Build any two digit number using manipulatives to represent amounts of tens and ones and show understanding of the following special cases: 1.NBT.F.2.BA

   A. 10 can be thought of as a bundle of ten ones -- called a "ten." 1.NBT.F.2.B.A

   B. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. 1.NBT.F.2.B.B

3. Compare pairs of two-digit numbers based on the values of the tens digit and the ones digits, recording the results of comparisons with the words "is greater than," "is equal to," "is less than," and with the symbols >, =, and <. 1.NBT.F.3

Ad. Write comparisons recording the results using both the greater than and the less than words and symbols (e.g., 27 > 21, and 21 < 27). 1.NBT.F.3.AD

P. Compare pairs of two-digit numbers based on the values of the tens digit and the ones digit, recording the results of comparisons with the words "is greater than," "is equal to," "is less than," and with the symbols >, =, and <. 1.NBT.F.3.P

Ba. Compare pairs of two-digit numbers based on the values of the tens digit and the ones digit, stating the results of comparisons with the words "is greater than," "is equal to," "is less than." 1.NBT.F.3.BA

G. Use place value understanding and properties of operations to add and subtract. 1.NBT.G

4. Add within 100, using concrete models or drawings and strategies based on place value: 1.NBT.G.4

   A. Including adding a two-digit number and a one-digit number. 1.NBT.G.4.A

   B. Adding a two-digit number and a multiple of 10. 1.NBT.G.4.B

   C. Understand that in adding two-digit numbers, adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.G.4.C

   D. Relate the strategy to a written method and explain the reasoning used. 1.NBT.G.4.D

Ad. Subtract within 100, using concrete models or drawings and strategies based on place value: 1.NBT.G.4.AD

   A. Including subtracting a one-digit number from a two-digit number. 1.NBT.G.4.AD.A

   B. Subtracting a multiple of 10 from a two-digit number. 1.NBT.G.4.AD.B

P. Add within 100, using concrete models or drawings and strategies based on place value: 1.NBT.G.4.P

   A. Including adding a two-digit number and a one-digit number. 1.NBT.G.4.P.A

   B. Adding a two-digit number and a multiple of 10. 1.NBT.G.4.P.B

   C. Understand that in adding two-digit numbers, adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten. 1.NBT.G.4.P.C

   D. Relate the strategy to a written method and explain the reasoning used. 1.NBT.G.4.P.D

Ba. Add within 100, using concrete models, manipulatives, or drawings and strategies based on place value: 1.NBT.G.4.BA

   A. Including adding a two-digit number and a one-digit number. 1.NBT.G.4.BA.A

   B. Adding a two-digit number and a multiple of 10. 1.NBT.G.4.BA.B

5. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. 1.NBT.G.5

Ad. Given a two-digit number, mentally find multiples of 10 more or multiples of 10 less than the number, without having to count; explain the reasoning used. 1.NBT.G.5.AD

P. Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. 1.NBT.G.5.P

B. Mentally find 10 more or 10 less than a multiple of 10 less than 100, without having to count; explain the reasoning used. 1.NBT.G.5.B

6. Subtract multiples of 10 from an equal or larger multiple of 10 both in the range 10-90, using concrete models, drawings, and strategies based on place value. 1.NBT.G.6

Ad. Without counting, subtract multiples of ten and explain the reasoning used. 1.NBT.G.6.AD

P. Subtract multiples of 10 from an equal or larger multiple of 10 both in the range 10-90, using concrete models, drawings, and strategies based on place value. 1.NBT.G.6.P

Ba. Starting at any multiple of ten in the range 10-90, verbally count backwards by tens. 1.NBT.G.6.BA

Measurement And Data

H. Measure lengths indirectly and by iterating length units. 1.MD.H

1. Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD.H.1

Ad. Given different organizations of more than three objects, justify an arrangement of the objects by length. 1.MD.H.1.AD

P. Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD.H.1.P

Ba. Compare two objects by length. 1.MD.H.1.BA

2. Use nonstandard units to show the length of an object as the number of same size units of length with no gaps or overlaps. 1.MD.H.2

Ad. Measure the same object using a non-standard unit of one length and then a non-standard unit of a different length. Explain how the two measurements relate to the size of the unit chosen. 1.MD.H.2.AD

P. Use nonstandard units to show the length of an object as the number of same size units of length with no gaps or overlaps. 1.MD.H.2.P

Ba. Use nonstandard units to show the length of an object as the number of same size units of length with no gaps or overlaps with guidance. 1.MD.H.2.BA

I. Work with time and money. 1.MD.I

A. Tell and write time in hours and half-hours using analog and digital clocks. 1.MD.I.3.A

Ad. Approximate time to the nearest hour or half hour on an analog clock based only on the hour hand. 1.MD.I.3.A.AD

P. Tell and write time in hours and half-hours using analog and digital clocks. 1.MD.I.3.A.P

Ba. Tell and write time in hours using analog and digital clocks. 1.MD.I.3.A.BA

B. Identify U.S. coins by value (pennies, nickels, dimes, quarters). 1.MD.I.3.B

Ad. Find equivalent values of coins up to and including quarters using coins of lesser value. 1.MD.I.3.B.AD

P. Identify U.S. coins by value (pennies, nickels, dimes, quarters). 1.MD.I.3.B.P

Ba. Identify at least two U.S. coins by value (pennies, nickels, dimes, quarters). 1.MD.I.3.B.BA

J. Represent and interpret data. `1.MD.J`

4. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. `1.MD.J.4`

Ad. Compare two different data sets with at least three categories to ask and answer questions. `1.MD.J.4.AD`

P. Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another. `1.MD.J.4.P`

Ba. Ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another when given an organized set of data. `1.MD.J.4.BA`

Geometry

K. Reason with shapes and their attributes. 1.G.K

1. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); for a wide variety of shapes; build and draw shapes to possess defining attributes. 1.G.K.1

Ad. Compare and contrast defining attributes from given shapes and use the comparison to change one shape into the other shape. 1.G.K.1.AD

P. Distinguish between defining attributes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size); for a wide variety of shapes; build and draw shapes to possess defining attributes. 1.G.K.1.P

Ba. Identify attributes (both defining and non-defining) for a wide variety of shapes. 1.G.K.1.BA

2. Use two-dimensional shapes (rectangles, squares, trapezoids, rhombuses, and triangles) or three-dimensional shapes (cubes, rectangular prisms, cones, and cylinders) to create a composite figure, and create new figures from the composite figure. 1.G.K.2

Ad. Decompose a composite figure (made of two and three dimensional shapes) and then compose to the original figure and create a new composite figure. 1.G.K.2.AD

P. Use two-dimensional shapes (rectangles, squares, trapezoids, rhombuses, and triangles) or three-dimensional shapes (cubes, rectangular prisms, cones, and cylinders) to create a composite figure, and create new figures from the composite figure. 1.G.K.2.P

Ba. Use two-dimensional shapes (rectangles, squares, trapezoids, rhombuses, and triangles) to create a composite figure. 1.G.K.2.BA

3. Partition circles and rectangles into two and four equal shares and: 1.G.K.3

A. Describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. 1.G.K.3.A

B. Describe the whole as two of, or four of the shares. 1.G.K.3.B

C. Recognize that decomposing into more equal shares creates smaller shares. 1.G.K.3.C

Ad. Partition multiple circles and rectangles into two and four equal shares and: 1.G.K.3.AD

A. Describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. 1.G.K.3.AD.A

B. Describe the whole as two of, or four of the shares. 1.G.K.3.AD.B

C. Recognize that decomposing into more equal shares creates smaller shares. 1.G.K.3.AD.C

P. Partition circles and rectangles into two and four equal shares and: 1.G.K.3.P

A. Describe the shares using the words halves, fourths, and quarters, and use the phrases half of, fourth of, and quarter of. 1.G.K.3.P.A

B. Describe the whole as two of, or four of the shares. 1.G.K.3.P.B

C. Recognize that decomposing into more equal shares creates smaller shares. 1.G.K.3.P.C

Ba. Partition circles and rectangles into two equal shares and: 1.G.K.3.BA

A. Describe the shares using the word halves. 1.G.K.3.BA.A

B. Describe the whole as two of the shares. 1.G.K.3.BA.B